

Title (en)

A COHERENT PHASE DEMODULATOR FOR POWER LINE COMMUNICATION SYSTEMS

Publication

EP 0026624 B1 19841227 (EN)

Application

EP 80303321 A 19800922

Priority

US 7782479 A 19790921

Abstract (en)

[origin: US4311964A] An apparatus and method for coherent phase demodulation of a binary phase shift keyed carrier includes sequentially processing plus and minus polarity samples of plural carrier segments occurring within each carrier data symbol. The samples for each segment provide a binary coded signal for producing corresponding first and second relative phase angle vector signals. The second vector signals are summed over several data symbols to generate reference phase angle signal vector signals. Correlation signals are produced from phase comparison of each of the first vectors with the reference vector signals. The correlation signals are summed in a synchronized relationship for the carrier segments included in each data symbol. The sums of the correlation signals represent either positive or negative correlations with the one and zero data bits of the carrier data symbols.

IPC 1-7

H04L 27/22; H04B 3/54

IPC 8 full level

H04B 3/54 (2006.01); **H03D 3/00** (2006.01); **H04L 27/22** (2006.01); **H04L 27/233** (2006.01); **H04L 7/033** (2006.01); **H04L 7/04** (2006.01)

CPC (source: EP KR US)

H03D 3/00 (2013.01 - KR); **H04L 27/22** (2013.01 - KR); **H04L 27/2337** (2013.01 - EP US); **H04L 7/0331** (2013.01 - EP US); **H04L 7/046** (2013.01 - EP US)

Cited by

EP0166911A3; EP0149546A3; AU686965B2; EP0118234A3; EP0119008A3; EP0034467B1

Designated contracting state (EPC)

BE DE FR GB IT SE

DOCDB simple family (publication)

US 4311964 A 19820119; AU 530917 B2 19830804; AU 6204080 A 19810820; BR 8005989 A 19810331; CA 1144257 A 19830405; DE 3069874 D1 19850207; EP 0026624 A2 19810408; EP 0026624 A3 19811007; EP 0026624 B1 19841227; FI 802907 A 19810322; JP S5654150 A 19810514; KR 850000278 B1 19850315; MX 150118 A 19840315; NO 802785 L 19810323

DOCDB simple family (application)

US 7782479 A 19790921; AU 6204080 A 19800904; BR 8005989 A 19800919; CA 359882 A 19800909; DE 3069874 T 19800922; EP 80303321 A 19800922; FI 802907 A 19800916; JP 12938180 A 19800919; KR 800003707 A 19800920; MX 18396880 A 19800918; NO 802785 A 19800919